



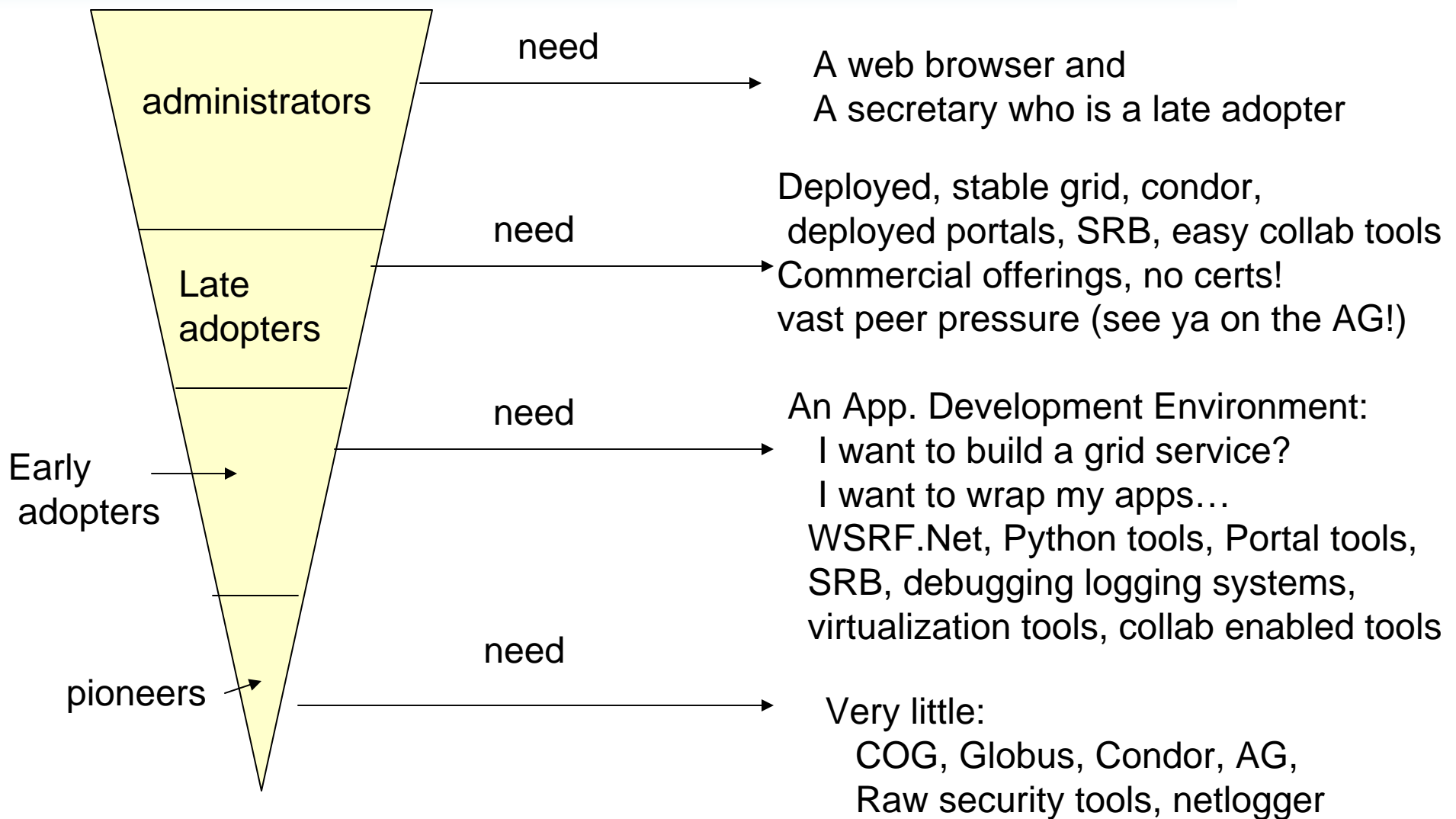
Funding Future Directions

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Too much modesty!

- This program is not huge, but it can claim MANY successes
 - AG, Globus, CogKits, SAM, Portals, Security, Condor, SRB & Data Services, WSRF.Net Gridware, Netlogger, ...
 - Each needed to leverage other funding from NSF and other sources
 - A nontrivial number of these have matured into commercial products/ventures.
- What should a future program look like?

The User Pile for Grid Technology



A program to fund the triangle

- With small amounts of funding you can help support a “pioneer” effort for a few years.
 - You need a lot of these because most are bad ideas.
- To go to the next step a pioneer need:
 - An influential early adopter who will help you
 - Fund a full FTE to push the technology to the application.
- To go the next step (late adopter):
 - You are now building cyber infrastructure for communities.
 - This requires many FTE and long term support.
- Finally you are starting a company or working with a big one.

Program Vision

- Need Ideas that truly enable new science for collaborating scientific communities.
 - Scientific Knowledge Grids
 - Information and Concept services
 - Advanced capabilities to manage realtime data streams.
 - Grid for managing swarms of very small devices.
 - Visualization tools that adapt to the users environment (collaboration spaces to web browser)
 - Electronic “Research Assistant” that is my agent on the Grid.
 - Revolutionary collaboration tools.
- We need to expect that many ideas will fail
- We need to expect that many of the best ideas were so simple that we forgot to think of them.
 - They will have high QOS!

Final Thoughts

- Deb's Messacappa Effect
 - *“This thing changed my life!”*
- Go out and find your own Tony Messacappa!
 - *How will you change his/her life?*
- Your prototypes will not be reliable.
- Your Tony will require you to devote one or more FTEs to his/her support.
- What the agencies need to expect of funding
 - *Open sourcing prototypes is good but not sufficient.*

Staged Funding

- DOE and NSF need to support staged development
 - Prototype proof, hardening, production deployment, transition to product.

